

and growing body of experimental evidence that challenges the accepted taxonomic placement of the recognized species of the genus *Pinus*. It is suspected that the commonly recognized species may, in many instances, conform closely to the subspecies of present-day thinking. One ancillary value of the pine breeding work being done at the Institute of Forest Genetics is the accumulation of experimental evidence that may contribute to a revision of the genus.

To record this hybrid form it is herewith described. The name proposed was chosen to show the derivation of the hybrid and to avoid the confusion that might follow the use of an orthodox name that gives no clue to the origin of the form described.

Pinus attenuradiata hybr. nov.

Arbor hybrida (*Pinus attenuata* × *P. radiata*), altitudo medio-cris, recta, pyramidata vel sub-rotunda, *Pinus radiata* similis; ramis numerosis, verticillatis, adscensis, apicibus diffusis; ramulis asperatis, squamis superioribus hyalinis; corte asperato, crasso, obscuro; gemmis terminalibus ovatis, acutis, 5–8 mm. longis, fuscis vel sub-rufis; foliis ternis, raro binis aut quaternis, circa 10 cm. longis, tenuibus, obscuro-viridibus; vaginis 10–15 mm. longis, adpressis, persistentibus, membranaceis, squamis pallidis aut sub-rufis, marginibus albidis, fimbriatis; canalibus resiniferis, medianis; iulis staminiferis ovato-cylindratis, 10 mm. longis; conis inaequalibus, ovatis, 2–5 verticillatis, sub-sessilibus, 8–15 cm. longis, 4–8 cm. crassis, squamis obscuro-fuscis, apophysis pyramidatis, tumidis; umbonibus planis aut elatis, spinis retrorsis, introrsis aut obsoletis; seminibus obovatis, truncatis, rugosis, 5 mm. longis, 3 mm. latis, 1.5 mm. crassis, testis coriaceis, nigris; alis oblongis, obliquis, obtusis.

Type. Eddy Arboretum, Placerville, Eldorado County, California, August 21, 1945, *Stockwell* and *Kimbrough 2012* (Herbarium of the University of California no. 694111; isotype, Dudley Herbarium, Stanford University, California).

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A NEW ALPINE GLYCERIA FROM CALIFORNIA

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The number of grass species confined to elevations of 9000 feet or higher in the Sierra Nevada of California is remarkably few. As reported to date they appear to be comprised of a pair

of species each for *Poa* and *Agrostis* as follows: *Poa rupicola*, *P. Suksdorfii*, *Agrostis humilis*, and *A. Rossae*. Here, also, *Alopecurus geniculatus*, *A. aequalis* and *Koeleria cristata* occur as a disrupted and isolated part of their distribution for they are known also from northern and coastal California. Study has failed to reveal specific differences in the high montane phases of these last three species. It is of unusual interest, then, to find in these California mountains a dwarf species of *Glyceria*, of the section *Hydropoa* Dum., associated on the margins of alpine lakes with the equally restricted *Scirpus Clementis* Jones.

Glyceria californica sp. nov. Perennis pusilla; culmi erecti, usque ad 2 dm. alti; laminae usque ad 5 mm. latae; paniculae viride aut purpurascens, erectae, scabrae, 3-6 cm. longae; spiculae circa 3 mm. longae, cum 3 ad 5 floris; glumae obtusae, gluma prima 1.26 mm. longa, gluma secunda 1.75 mm. longa; lemnae inferiorae cum 7 nervis, scabrae; paleae subaequalae.

Dwarf perennial; culms not over 2 dm. tall; blades up to 5 mm. broad, frequently exceeding the panicle; panicle green or becoming purple, 3-6 cm. long, erect, the short branches ascending, strongly scabrous; spikelets ca. 3 mm. long, 3- to 5-flowered; glumes broadly obtuse, the first 1.25 mm. long, the second 1.75 mm. long; lower fertile lemmas 3 mm. long, prominently 7-nerved, scabrous on and between the nerves, the apices erose; palea subequal.

Type. Farewell, Tulare County, California, altitude 10,000 to 11,000 feet, *C. A. Purpus 2057* (type, Herbarium of the University of California, no. 121966). Also known from Rae Lake, Fresno County, Mrs. Joseph Clemens in 1910 (Clokey Herbarium at the University of California, Berkeley).

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A LIST OF ALGAE CHIEFLY FROM THE ALPINE ZONE OF LONGS PEAK, COLORADO

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Phytogeographic considerations make it important to call attention to the fact that Colorado has a range of elevation from 3350 feet above sea level (at the Arkansas River, Prowers County) to 14,420 feet at Mount Elbert. The approximate mean elevation for the entire state, as determined by the United States Geological Survey, is 6800 feet, which is higher than the average elevation of any other of the United States of America.

This wide range of elevation implies a wide range of climatic conditions to which the vegetation is adapted and results in the